

## Optional Features for Outdoor Learning Areas

### Environmental History

**Description** – Environmental history is the historical interaction between the natural world and humans. It provides an opportunity for the school community to experience hands-on history. Environmental history can be seen in such things as architecture and building materials, the placement of bridges and roads, artifacts of human settlements, patterns of stone walls, or changing patterns of land use over time. Retaining large and significant trees in an outdoor learning area can preserve an important piece of history and serve as a guide to other historical events in the community. The history of our trees can lead us to discover patterns of settlement, economic conditions, technological change, political events, and changes in attitudes toward the natural environment over time. When construction and renovation call for the removal of trees from the land, we are removing part of history. However, by preserving cross-sections of these trees, a timeline of that history can be retained and explored. **Size** – Preserve and maintain cross sections from the smallest to the largest trees with the idea of documenting environmental and community history. Depending on the size of a cross-section removed from a tree, create an easily accessible area 12 feet by 10 feet for comfortable observation by a class of students.

**Location** – Whether an urban or a rural area, the history is already there, in every location.



**Materials Needed** – Aerial view maps are often available from the physical plant office of your local school board. The Library of Congress web site ([www.loc.gov](http://www.loc.gov)) often contains aerial maps that give past information on settlement, land use patterns, and the historic location of natural resources. Large equipment may be needed to cut and move the tree cross-section to a display.

**Labor Needed** – Gather historical photographs of the site from community members, previous property owners, etc. Take a tree inventory of the site by labeling and numbering trees on an aerial map. Note the condition of the tree and any evidence of human activity that affected the shape. Measure and record the circumference of the tree 1.3 meters from the ground. Try to find out why the tree was planted. Was it for aesthetic, economic, or ecological reasons? Correlate the tree inventory with an inventory of historic maps of houses from earlier days, and pictures of the area through various periods in history. Cut cross-sections from significant trees being removed and prepare a place on site for the display. Take photographs before, during, and after construction to create a photo archive of the area.

**Technical Assistance** – Contact the Kentucky Heritage Council or visit their website at (<http://www.state.ky.us/agencies/khc/khchome.htm>). Contact the Kentucky Division of Forestry to learn more about each species of tree and its historical uses. See <http://www.forestry.ky.gov/>. Still more information can be found at local museums and area historical societies.

**Application** – The subject of environmental history provides many opportunities for standards based teaching and learning.

- Students can perform research, including toponymy (the study of place names) to find the history of their town.
- Students can increase environmental history studies through tracking the harvesting of trees during early settlement, by examining over-cutting during the industrial age, by considering regeneration during wars, and by investigating protection of trees during post-war and contemporary eras.
- Students walk through local historical districts, visit parks and common areas, research in cemeteries, and learn about historic landmarks to further their environmental history studies and increase map skills.
- Students continue measuring and documenting for the tree inventory.

- Cultural objectives may be met when students study the history of the people that planted and protected the trees on the site. Whether planted for aesthetic, economic, or ecological reasons, the trees provide students the opportunity to chart the intention and impact of people on their environment.
- Communication and writing skills are enhanced as students gather oral histories and present research.
- Correlating historical architecture with other events in your community's history provides the student opportunities to develop timelines and enhance visual arts.

**Maintenance** – Visit trees on the property regularly to assure their health and continue historical documentation.

**Challenges** – Searching through land titles to find previous owners and researching the history of the area are time consuming and often require the services of a person who know how to do historical searches. Allow students to be as involved with this process as possible and rely on local historical societies for assistance. Check for fallen branches, wind damage, disease, etc. to maintain a safe environment for student research.

Other websites to learn about historic trees.

- <http://www.heritage.ky.gov>
- <http://home.earthlink.net/~jeffkrueger/links.html>
- <http://www.smithsonianmag.si.edu/smithsonian/issues96/oct96/bigtrees.html>
- <http://www.acf.org/>
- <http://www.historictrees.org/>
- <http://www.silentwitnesses.org/>